California GARDEN

NOVEMBER-DECEMBER 1994 Volume 85 No.6 $1.50

HORTICULTURAL CALENDAR

Nov. 1	★**SAN DIEGO FLORAL ASSOCIATION** Basket Class Casa del Prado, Balboa Park. Remedial basketry class. 9:30AM–2:30PM Reservations 232-5762. $5.
Nov. 3-6	**THE HUNTINGTON** Fall Plant Sale & Lectures 1151 Oxford Rd., San Marino. Thurs. through Sun. 1–4:30PM 818/405-2100. Donation $7.50.
Nov. 5	**RANCHO SANTA ANA BOTANIC GARDEN AT CLAREMONT** Annual Plant Sale 1500 No. College Ave., Claremont. Sat. 9AM–1PM Call 909/625-8767.
Nov. 5	**CALIFORNIA MACADAMIA SOCIETY** Group Seminar "King of the Nut World" Wilderness Gardens Preserve. Sat. 8:30AM Call 728-8081. Lunch included. $12 or $15 at event.
Nov. 5-6	**LAKE HODGES NATIVE PLANT CLUB, INC.** 11th Annual Plant Sale Vons' Market, Bernardo Center Dr., Rancho Bernardo. Sat. & Sun. 9AM–4PM. Call 741-0829.
Nov. 5-6	**SOUTH COAST BOTANIC GARDEN FOUNDATION, INC.** Chrysanthemum Show & Sale 26300 Crenshaw Blvd., Palos Verdes Peninsula. Sat. & Sun. 9AM–4PM. Call 310/544-1948. $5.
Nov. 8	★**SAN DIEGO FLORAL ASSOCIATION** Victorian Tree Ornaments Class Casa del Prado, Balboa Park. Tues. 9:30AM–2:30PM. All materials furnished. 298-5182. $18.
Nov. 12-Dec. 4	**SCRIPPS CLINIC/AMERICAN SOCIETY OF INTERIOR DESIGNERS** Holiday Vignettes The Paladion, 777 Front St. 10AM–6PM Call 554-9374. Groups $8. Individuals $10.
Nov. 15-22 & 29	★**SAN DIEGO FLORAL ASSOCIATION** Flower Arranging, Series II Casa del Prado, Balboa Park. Tuesdays, 9:30AM–4:30PM. No materials furnished. 298-5182. $35/$40.
Nov. 19	**QUAIL BOTANICAL GARDENS** Lecture & Book Signing: Torrey Pines 230 Quail Gardens Dr., Encinitas. Sat. 11AM. Author, Bill Evarts. 436-3036. $2.
Nov. 20	**SUMI-E PAINTING AND IKEBANA** 19th Annual Show Casa del Prado, Majorca Room, Balboa Park. Sun. 11AM–4PM. Free.
Dec. 2	★**SAN DIEGO FLORAL ASSOCIATION** "Seasons Greetings" Preview Tea Casa del Prado, Balboa Park. Preview & Tea for members and friends. Fri. 3–5PM. 232-5762.
Dec. 2-3	★**SAN DIEGO FLORAL ASSOCIATION** "Seasons Greetings" Casa del Prado, Rm 101, Balboa Park. Fri. 5–9PM; Sat. 11AM–9PM. Call 232-5762. Free.
Dec. 5	★**SAN DIEGO FLORAL ASSOCIATION** Bus Tour Banning Museum and Sherman Gardens. Reservations 232-5762. Member $30; Nonmember $33.
Dec. 6	**LA JOLLA GARDEN CLUB** Annual Holiday Tea and Bazaar La Jolla Women's Club, 715 Silverado St. Tues. 12:30 to 3:30PM. Call 456-0992. Donation $7.50.
Dec. 9	**QUAIL BOTANICAL GARDENS** Celebrating the Holidays 230 Quail Gardens Dr., Encinitas. Fri. 5–9PM. Carolers & Lighted Gardens. 436-3036. $2.
Jan. 7	**THE HUNTINGTON** Rose Pruning Demonstration 1151 Oxford Rd., San Marino. Sat. 11AM–1PM. 818/405-2141. Donation $7.50.
Every Month Oct. to May 95'	**PALOMAR DISTRICT C.G.C.I.** Floral Design Forum San Diego Miramar N.A.S., Officers Club Ballroom. First Monday each month. 1–3PM Reservations call V. West 749-1920. Cost for the series through May 1995 is $35.
Every Wednesday	**LOS ANGELES STATE & COUNTY ARBORETUM** Free Guided Tours 301 N. Baldwin Ave., Arcadia. Guided Walking Tours of Gardens. 11AM Call 818/821-3250.
Every Saturday to Nov. 20	**OFFSHOOT TOURS** One-Hour Plant Walks in Balboa Park Meet 10AM. Botanical Lath House. Canceled for rain or less than 4 attendees. 1st Sat. History Walk; 2nd Sat. Palm Walk; 3rd Sat. Tree Walk; 4th Sat. Desert Walk; 5th Sat. Tour del Dia. Free.
Weekends 1994	**SAN DIEGO NATURAL HISTORY MUSEUM** Canyoneers Outdoor Program Free guided nature walks. Information & brochure call 232-3821 Ext. 203.
Weekly	**SANTA BARBARA BOTANIC GARDENS** Garden Events For lectures, tours and garden schedule call 805/682-4726.
Weekly	**SAN DIEGO JAPANESE FRIENDSHIP GARDEN** Docent Tours Balboa Park at Organ Pavilion. Tues., Fri. through Sun. 10AM–4PM. 3rd. Tues.; free. Gate donation.
Weekly	**QUAIL BOTANICAL GARDENS** Fall Classes and Events 230 Quail Gardens Dr., Encinitas. Call for schedule 619/436-3036.

Deadline for submission to HORTICULTURAL CALENDAR for Jan./Feb. issue is Nov. 15.
SAN DIEGO FLORAL ASSOCIATION is not responsible for changes in information which has been submitted by the organizations.

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Manuscripts are invited. Deadlines are the 20th of January, March, May, July, September, and November. *California Garden* reserves the right to edit any and all submitted material. All manuscripts and illustrations will be handled carefully, but we cannot assume responsibility for their safety. Submissions must be double spaced and/or on a computer disk from IBM or compatible. Enclose self addressed post paid envelope if you expect them to be returned to you. *Hortus Third* is the authority for all botanical names used in the magazine. All opinions expressed are those of the authors and do not necessarily reflect the views of the editors of *California Garden*. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

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Cover drawing of oleander by Jeanie Foord (1906), reprinted from *Decorative Plants and Flower Studies*, Dover Publications.

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FLOWER SHOWS: Show chairman contact *California Garden*, 232-5762 if you want the magazine sold at your show.

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Gleanings . . .

BOTANICAL BUILDING TO REOPEN . . .
The Botanical Building, more commonly known as the Balboa Park lath house, is scheduled to reopen on the 19th of November. The full landscaping probably will not be completed, but it will be open to the public for viewing.

BALBOA PARK LILY POND . . .
In July a biofilter system was installed in the Balboa Park lily pond in front of the Botanical Building. It is now called the "Koi and Lily Pond." During the night when there is no sunlight there is **no** plant photosynthesis, so that process is reversed and plants release carbon dioxide instead of oxygen. During the night all aquatic plants, including algae, consume oxygen. This can be life threatening to fish populations. This system was installed to help remove organic compounds and in so doing help to replenish plant oxygen. It performs two functions (1) converts toxic waste substances into nontoxic nutrients and (2) mechanically filters out large waste. In other words, it strips waste from dirty water and cycles cleaner water back into the system. If you stand on the mid-walkway you can now see the 8 foot wide gravel bed extending from edge-to-edge under the surface. When water is drawn down through the gravel bed it causes bacteria to grow and chemically break down the organic compounds. The water is more transparent, you can see the fish, and the ducks love it. Some of the water plants are no longer in place, but it is beautiful and the balustrades are always lined with people, old and young, enjoying the pool.

DATE PALMS FROM SEEDS . . .
To grow a date palm from a seed fill a pot with a drainage hole with rich potting mix, and push the seed vertically down into the soil about 1½ inches. Keep the seed moist and warm by watering with warm water. In about 4 to 6 weeks the first leaves should begin to appear. It is unlikely the date palm will ever produce fruit. (The seed is in the middle of the date. This is date season so fresh ones are available at your local market.)

COLBERT ADDRESS . . .
At printing time for the September/October issue, we didn't have current information about Teddy Colbert, who designs and sells her patented frames, instructions and all supplies for succulent wreaths. She believes that her methods result in the longest-lasting wreaths. She can be reached at 1-800-TEDDY81, or write Teddy Colbert's Garden, P. O. Box 9, Somis CA 93066.

Botanical Building photo by Betty Newton

WHOLESALE (?) SEED REQUEST . . .
We have a request from a mail-order seeds and tropical nurseries person in northern France. He/She asks companies to send their list of tropical plants and seeds, prices, shipping and handling charges, and minimum quantities to France.
(tel. 23 79 67 64, FAX: 23 23 47 56) or write to:
J. Pavlenko
Jacaranda "Graines & Semences"
19 Rue Novelle-France
02000 Laon, France

FREE EVENT LISTINGS . . .
Two newer quarterly magazines will print a free listing of your event, space permitting.

Four months before event send name of event, dates, sponsor, place, and telephone number to:
Country Living Gardener, "Forget-Me-Not,"
224 West 57th Street, New York, NY 10019.

Seven months before event send same information to:
"Gardener's Datebook," *Country Gardens* Magazine,
1716 Locust Street, Des Moines, IA 50309-3023.

VOCABULARY AND GRAMMAR . . .
"Crosier" (or crozier), in its botanical use, is a new word to this editor. It's defined as any botanical structure with a curled or circinate tip, as the young frond of a fern.

Many readers may not have noticed, but since there are conflicting opinions on correct usage, we have used various forms when writing plurals of scientific names. Since the plurals of Latin and Greek might be unknown to editors or, if used, unrecognizable to most readers, we have now opted to use the singular always. It may take us a while to become coordinated in this usage.

THE OLEANDER

by BARBARA S. JONES

ONE OF THE MOST widely used landscape plants in Southern California is the oleander. Its ability to withstand drought, vehicle emissions, spasmodic care, and climate and soil that is often marginal has made it a popular plant for highway and commercial plantings. And it's pretty.

In recent years there have been warnings that one should not use it because it is an extremely poisonous plant. Rubbish—most people have to eat it to get poisoned. There are individuals that are allergic to the pollen, sap, etc. (Someone is allergic to any plant you can think of.) I grew up around them and throughout my luau high school and college years we all made and wore leis using oleander blossoms and the girls wore them in their hair all summer. No one I ever knew ate them or used oleander sticks for toasting food over an open fire and no one ever had a problem with their skin, eyes, or breathing. There is an old rule-of-thumb: *Never eat anything with a milky sap.*

The common oleander, *Nerium oleander*, is native to the damp valleys and seasonally dry watercourses with gravely soil of the Mediterranean region. It has been a popular plant there since before history. It is mentioned in the earliest Greek writing. *Nerium* is the early Greek name of this plant. (The people have all survived there, too.) Just as in Southern California, today the roads, streets, and highways of the Mediterranean region are made beautiful by being lined with oleanders.

There are over four hundred cultivars of oleanders recorded. The leaves, which are a dark green with a paler green underside, are 4-12 inches long, lance shaped, and grow in whorls. The flowers are funnel shaped opening to five petals. They are single, semi-double, and double and are borne in clusters at the end of new growth branches. The colors are white, cream, pink, lilac, red, carmine, purple, yellow, salmon, apricot, flesh, copper, and orange. *Nerium oleander 'varigatum'* has leaves edged in cream, white, or yellow and the flowers are double and rose-pink. *N. endicum* and *N. odorm* have sweet scented flowers. They are less robust plants and the leaves are slender and more widely spaced. This is an attractive, billowy, many branched, woody-stemed shrub that can reach 20 feet and can be trimmed to a tree shape. Three branches come from each joint. There is a new miniature form that has smaller flowers and grows to 24 inches.

The plant prefers a fertile soil but almost any soil will do if it is well drained. It prefers full sun. Planting can be done here year-round from containers. In spring and summer it can be propagated from terminal cuttings of firm shoots. The cuttings, after being allowed to dry a bit, can be started in sand or sandy soil and can even be started in water. Fertilizing should be done with a high phosphorus food (5-23-5) or any all purpose mix. (I use steer manure every year or so.)

Oleanders can be pruned at any time but late winter is recommended. It can be drastically cut (to 6 inches) to control size and the roots can be trimmed. It is best to wear gloves when pruning because the milky juice can irritate the skin.

Oleanders can withstand short bouts of frost but prefer a climate that does not go below 40°F. New plants should be watered regularly—but established plants can withstand very infrequent watering even in summer. It is fairly disease resistant, but scale, mealybugs, and aphids can be problems. It is a long-lived plant. Many planted during the beautification projects in 1912 to 1914 are still surviving as beautiful small trees along Ocean Beach streets.

This easy to grow plant makes excellent background plantings, windbreaks, screens, and informal hedges. It can be grown in large tubs. One of the most interesting plantings I saw was in the Alhambra gardens in Spain. The plants were trained over iron supports to form a living, covered walkway about a block long. It was very cool in the shade as I walked from one part of the garden to another.

Horticulture books say its common name is rose bay, but in San Diego it has always been called oleander.□

The sketch is by Jeanie Foord.

BARBARA JONES has gardened in San Diego most of her life and this interest led her to major in botany in college.

THE VERSATILE BAMBOO

by TINEKE WILDERS

A VERY SPECIAL AND HISTORIC event is taking place next year in Ubud, Bali, Indonesia, featuring the most viable alternative to the world's rapid deforestation and timber shortages: the use of bamboo. For the first time ever, representatives from the industry, environmentalists, and politicians, who have been looking seriously into bamboo as a workable solution, will be congregating at this important event.

At the Fourth World Bamboo Congress and Festival the latest scientific research into the cultivation, treatment, and uses of bamboo will be discussed. The early June 1995 Congress is also open to the public.

Bamboo is an extremely versatile plant and has been used as art as well as in architecture, in musical instruments, in cooking, and in furniture. There are more than one thousand known species in about seventy genera of bamboo, most of them native to the tropical and subtropical regions of Southeast Asia, China, and Japan.

There are even species in Africa, in Madagascar, and in Australia, found from sea level to over ten thousand feet, and from near-desert to regions of heavy rainfall. In the Western Hemisphere, they are native from Missouri and Maryland southward throughout Central America to southern Argentina and Chile.

Bamboos are long-lived, woody evergreen plants in the grass family (Gramineae or Poaceae), in the tribe Bambuseae, ranging in height from as low as one foot to as tall as one hundred feet or more. For centuries the various species of bamboo have provided the world with the raw material for such things as: scaffolding, fences, plant stakes, utensils, food, paper, tool handles, fishing and ski poles, shade mats, and clothing. Gardeners like to grow bamboo as an ornamental plant and there are several graceful varieties that are perfect for this. They are even used for bonsai effect.

Bamboos fall into one of two categories according to their root structure:

RUNNING BAMBOO—this has a horizontal underground root structure (rhizomes) and has the potential to grow into a thicket or a little forest. Examples here are the timber bamboo, *Phyllostachys bambusoides*, which can reach up to seventy feet in height; and the golden bamboo *P. aurea*, which keeps a moderate height of fifteen to twenty feet. There are even low-growing bamboos (up to three feet in height) that can function as a ground cover, such as *Pleioblastus distichus, P. pygmaeus*, and *P. viridistriatus*.

CLUMPING BAMBOO—this has very short, closely spaced rhizomes that form a tight clump, from which the plant's branches and leaves emerge. Examples here are *Bambusa multiplex*, multiple-branched and slow-spreading, which will grow into an ideal privacy hedge, attaining about thirty feet. The lacy Mexican weeping bamboo, *Otatea acuminata* ssp *aztecorum*, is my favorite, with its elegant weeping form (and it is hardy to 22°F). It is also drought-tolerant.

Quail Botanical Gardens in Encinitas has an outstanding bamboo collection with well over seventy different species, making it one of the largest collections in the United States. The western slope of the garden is planted with a multitude of giant clumping bamboos (*Bambusa beecheyana* and *B. textilis*) as well as some running bamboos of the genus *Phyllostachys*. Several species native to Mexico and Puerto Rico are planted in and around the tropical canyon area.

Quail Gardens also has several quarantine-holding greenhouses where bamboos from other parts of the world are held and grown for one year after acquisition to ensure they are free of foreign pests and diseases. After that they are released into the permanent collection. Several times a year Quail has a fund-raising plant sale and many interesting bamboos are for sale. For more information, call the gardens at (619)436-3036.□

(*Editor's note*: There is much confusion about bamboo nomenclature. A combination of listings from *Hortus Third* (1976) and *The New Royal Horticultural Society Dictionary of Gardening* (1992) has been used.)

TINEKE WILDERS is a freelance garden writer/broadcaster, living and gardening in the San Diego area. She writes a regular column in the Sunday "Home/Garden" section of *The San Diego Union-Tribune*.

Ms. Wilders will escort a two week tour of Singapore, Java, Sumatra, and Bali, from May 21 to June 7, 1995, which will coincide with the World Bamboo Congress and Festival. For additional information or a brochure, call (619)459-0681 or 1-800-869-0674.

BULBS IN POTS

by BARBARA S. JONES

TULIPS

EVEN IN THE MILD coastal climates of San Diego County tulips can be successfully grown both in the garden and in containers. Container growing is probably the easiest if the tulips are treated as annuals and given an artificial winter.

Tulip bulbs become available in the local nurseries by mid-September. Store them in a cool place until mid-October and then place them in a mesh bag in the vegetable bin of the refrigerator until late November. (A temperature of 45–50 degrees is recommended.) **Be sure that there is no fruit in the refrigerator, because ethylene gas given off by ripening fruit will kill the flower inside the bulb.** Six to eight weeks of refrigeration is recommended. Do not let the bulbs warm. Plant them directly after taking out of the refrigerator. If planted about Thanksgiving, the bulbs should bloom in mid-February. Do not plan on saving the bulbs—toss them out after they bloom.

Bulbs do the best if planted in large containers (at least 16 inches high). Place the bulbs, almost touching, on 8 to 10 inches of potting soil. Cover with 4 inches of soil. The level of the soil should be 2 to 3 inches below the rim of the container. (This will help to support the growing leaves.) A 1 inch thick layer of mulch will help to retain moisture and keep the bulbs cool.

Many gardeners feel that the most reliable tulips are: Maytime, Maureen, Asta Nielsen, Blue Jay, Cocktail, Elizabeth Arden, Halcro, Menton, Redwood, Renown and West Point. As a rule of thumb, late blooming, single tulips do best in warm climates.

ANTIQUE BULBS

TULIPS WERE INTRODUCED TO the Netherlands from Turkey over four hundred years ago. Many tulips and other bulbs have been grown unchanged in American and European gardens for several centuries. These are a result of conservation rather than restoration. The Keizerkroon Tulip, a popular antique bulb, has been cultivated by Dutch growers since 1750. *Fritillaria imperialis* 'Rubra Maxima' has been grown unchanged since 1574.

If one would like to collect bulbs they should know the difference between "botanical species" which resemble the flower as it grows naturally in the wild, and "botanical" bulbs which are the handiwork of early hybridizers. Antique tulips include Kaufmanniana, Fosterians, and Greigii-type. Antique bulbs, including tulips, that will do well in San Diego are: *Narcissus tazetta* 'Avalanche', *N. poeticus recurvus*, *N. obvallaris*, *N. jonquilla* species, *N. x gracilis*, *Tulipa greigii* 'Plaisir', *T. turkestanica*, *T. praestans* 'Fusilier', *T. tarda*, *Iris reticulata*. □

Tulip photos courtesy of Calif. Assoc. of Nurserymen.

THE BEAUTY OF BLOOD LILIES

by CATHERINE L. ZINSKY

FEW WILL ARGUE THAT bulbs are easy to grow, which is why it's curious so few gardeners cultivate *Haemanthus*. Known as blood lilies because of red spots on the bulbs themselves, *Haemanthus* is well worth the little effort it takes to foster the bulbs along. Of the more than five dozen species in this Amaryllidaceae (amaryllis family), I can vouch for at least three as being distinctly noteworthy and readily available: *H. albiflos, H. katharinae, and H. multiflorus.*

Haemanthus is a true bulb, not a corm or tuber. It is native to Africa, and as such adapts well to our own temperate climate. Best of all, it has unusual yet spectacular flower heads that are long-lasting, distinguished, and showy.

Haemanthus albiflos is perhaps the easiest of the three to grow. It is evergreen, having wide, thick, bluish-green strap-like leaves that are ciliate, meaning they are covered with tiny hairs. This gives the leaves a fuzzy appearance.

Aptly and commonly referred to as "white paintbrush," the flower of *H. albiflos* consists of white bracts enclosing a host of stamens that compositely resemble an artist's paintbrush. These paintbrushes are held 8–10″ above the strap-like leaves, which remain fairly low to the ground. Mine bloom in November and December, giving added value to the cultivation of the attractive bulb.

H. albiflos responds well in containers, enjoying being crowded. It does best in filtered light, takes moderate watering, and is duplicated by division.

Haemanthus katharinae is perhaps the most lovely of the three. The flower of this blood lily can be quite large—up to 9″ in diameter. The flower head is an umbel, which is a ball-like cluster of flowers at the top of a stem. The pedicel (flower stem) of each flower originates from the same point on the main stem, which in *H. katharinae* can be as tall as 2′.

The individual flowers that make up the umbel are small, red or salmon-red, and have protruding, vivid yellow stamens. The overall effect is breath-taking, especially when grouped in a pot.

The leaves of *H. katharinae* are also evergreen, but neither fuzzy nor thick. They are also of a deeper green and have a subtle pattern due to veining. Offsets can be taken in the spring to propagate. *H. katharinae* blooms in late spring and early summer.

The umbel of *H. multiflorus* much resembles that of *H. katharinae* with minor differences; the petioles are shorter, and the individual flowers on the umbel are smaller, as is the umbel itself (3–6″ across). It is often called the salmon blood lily. Its color is softer than *H. katharinae.*

Another difference is that *H. multiflorus* is not evergreen. Once dormant, the bulb should be kept dry. This lovely blood lily blooms in late summer (mine bloomed for at least two weeks in August), and can also be propagated by removing offsets. (Offsets are the small bulbs that are produced on the sides of the mature bulbs.)

All *Haemanthus* can be grown outdoors in Zones 9 and 10. They are, however, frost sensitive, so protection may be necessary in some areas.

When planting, set the bulb so its tip is just above the surface. Pot in spring, using a container about twice the size of the bulb. All blood lilies prefer filtered light, and if given at least four hours of optimum light a day, will perform agreeably as house plants. A light application of an all-purpose fertilizer during the growing season will be well received.

Under no circumstances allow your blood lily to sit in water. As with most bulbs, *Haemanthus* bulbs will turn squishy and rot if left standing in water. Snails and slugs love these plants, so watch carefully for them.

Most reputable nurseries carry one or more *Haemanthus* species in their bulb displays. If you're unwilling to risk losing out on this distinctive genus, put in a request at your favorite nursery. Good luck and happy gardening!□

(Note: In the May/June issue I stated that the "tower of jewels" plants at the Huntington Botanical Gardens were small (2½ feet) as compared to mine. Kathy Musial, Curator of Living Collections at the Huntington, politely set me to rights. They do, indeed, have *Echium wildpretii* reaching 6–7+ feet.)

CATHERINE L. ZINSKY is a garden writer for national magazines.
Photo of *Haemanthus albiflos* by the author.

POLLY'S CORONADO GARDEN

CLAIRE NORMAN TRINE

THE CASUAL PASSERBY CANNOT help but notice the faint perfume scenting the air while walking past this white house on the corner. To one who loves gardens, the nose leads its owner through the lathed archway that opens up into the fragrant and cozy garden set in the dappled Coronado sunshine.

Such is the case with the garden in Coronado belonging to Polly Jones and her husband. Situated near Spreckles Park, on Sixth Avenue, Polly has created a delightful paradise that I have named *California Cottage*. Looking like a cross between an English cottage garden and a Mediterranean villa garden, Polly Jones has designed a soothing place in which to repose. After seeing the work-in-progress photos, its hard to believe this charming hideaway has been transformed from a stark pool area shaded by towering and imposing hedges into a comfortable place for gathering friends and family in its various garden rooms.

After purchasing the 1912-built house four years ago, Polly and her husband began a major renovation of the house as well as the yard. "We lived in half of the original barn; the space was about ten feet by ten feet," recounts Polly. "Though the house was a big undertaking, I was anxious to start on the yard. I began on the piece farthest from the house and worked my way closer as the house became more finished." Today, the renovated house and gardens look as if they have been together for many years.

Working with an existing apricot tree, a large jacaranda, and an old established pine tree, Polly used them as the backbone of this back garden. She then filled in with new plant material, *layering*, as she calls it. This was accomplished by placing descending sized plants from the fence line until reaching the lawn at the center. Today a visitor would assume this garden finished but Polly continues to add plants, annuals and new finds, to whatever space there seems to be. "I like to think of it as controlled chaos," laughs Polly. Throughout the garden can be found her unique touches: an old brass headboard used for sweet peas to trail upon, a wire archway draped in fragrant deep pink roses that would be perfectly at home in southern England, and scattered throughout the garden can be found empty bird cages alongside full bird feeders for the winged visitors who no doubt enjoy this garden as well.

The garden closest to the house, and entered via the covered archway from the street, features roses as the foundation plantings with two-story tall ficus trees lining the wood fence shared with the neighbors. Below, filling in, one finds azaleas, camellias, sword ferns, and impatiens again layered to the lawn's edge. Several large gardenias provide visual weight as well as an unending source for corsages in the spring. "I think there must have been seventy blooms on each of my gardenia plants this year," Polly exclaims. "They were just covered in white blossoms! And the scent was unbelievable, people walking by couldn't help but notice." Along the sidewalk, outside the fence, this plant mixture can be found again on the opposite side of the fence. Blooming yellow enchantment lilies beside fragrant gardenias, mixed in with nearly twenty other plants make the side yard a riot of color and a visual feast.

Walking through the gardens one can always find something missed earlier. Salvias, rosemary, scented geraniums, basils, ferns, impatiens, and assorted annuals poke out from underneath the larger plants. When asked where her inspiration for the garden came from, Polly doesn't admit any. "This garden just sort of evolved," she claims. It may seem amazing to those meticulous planner types who, with exacting patience, leave nothing to chance. Polly's garden appears to have been created to look as if it sprouted on its own. This writer cannot help but be reminded of the Japanese manner in which gardens are created: though they look as if nature did the work, their creators actually studied it carefully in order to get

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HOW MUCH TO WATER?

by MORT BRIGADIER

HOW MUCH WATER INDOOR plants need depends on how much empty space there is in the soil and on how big or small the spaces are. Visualize a cubic foot of soil consisting of small particles of different shapes and sizes, some microscopic, some visible to the naked eye, some organic, others not. Imagine that each of these millions of particles is separated and surrounded by empty space. The "empty space" gives the soil its porosity, allowing excess water to drain down and away.

The process is easy to follow. When water accumulates, it fills the empty spaces and the planting medium achieves "field capacity." Water eventually drains downward under the forces of gravity, leaving the larger pores filled with air and the smaller pores filled with water.

Giving a plant more water than it can hold is never better. It drives out the air, depletes the oxygen, and plants can drown in their own medium. There is no CPR for a drowning plant, but a wilting plant can be resuscitated with a generous, lifesaving dose of water.

It's always safer to underwater than overwater. But there is no need to guess at how much water. We can measure, and start a history, of the amount of water each plant needs and when it needs to have it.

We know that plants need water in direct proportion to the amount of light they receive. As the quality and quantity of light decreases, the process of photosynthesis also decreases. The plant slows down, manufacturing less energy, using less fuel, needing less water.

When a plant is brought indoors into medium light (enough light to read a newspaper by) water may be reduced by as much as 50%. When brought into low light (where only the headlines can be read) water may be reduced by 75%. Most plants will adjust and tolerate extremely low light conditions provided they are "weaned" to accept less water. It's never a good idea to soak the new plant to "make it grow."

Light is the quintessential ingredient in indoor planting. The adjustment from nursery light to indoor light is made by reducing the amount of water the plant receives, by changing the water cycle, and by placing the plant where it gets the best light.

The "best" light may, or may not, be near a window. Window light is always brighter than artificial light and may magnify and burn. It rapidly loses intensity as it travels across a room, but it also can reflect off walls and mirrors and increase. (Window light will differ in intensity with the angle and direction of the sun.)

There is a direct relationship between light and the thickness of leaves. Plants with thick leaves adjust more readily to low light, use less water, and grow at a slower pace using (and creating) less energy.

Plants with thick leaves may not flower under reduced light but can be kept green and healthy. Conversely, plants with thin leaves need to be placed where they get more light. Plants with thin leaves use more water, need more light, grow at a faster pace and stand a better chance of flowering under low light conditions.

You can rarely kill a plant by underwatering in low light conditions. The plant will show its need for water in plenty of time to be saved. There is no CPR, however, for an overwatered plant.

When watering, apply the green thumb rule; let the pot dry out between waterings. But this is common knowledge; everyone knows to do this. NEXT TIME WEIGH THE POT! Weigh at "field capacity" when it is filled with water; weigh it again when it is dry. The difference in weight is the amount of water in liquid ounces that you will need to replace at each watering. We are indeed fortunate that a liquid ounce of water approximates one ounce of weight! It tells us "how much?".

The plant will tell us when and how often it needs to be watered. It will "tell us" by drying out. Some pots will dry out in a few days, others will not dry out until weeks have passed. The time it takes for the pot to dry out is the water cycle for that particular, individual plant. Plants will tell us when they need to be watered by tipping the scale at a lower weight. (Once the water schedule is set, water one day earlier to eliminate any possibility of last day stress.)

Finally, plants need to be routinely examined for the slightest change in appearance, for insects, for early signs of water stress (too little or too much). Having established a base line, as plants grow and seasons change, as plants use more or less water, the water schedule may need to be fine tuned.

How much water house plants really need depends on the weight of the "lost water," and on the accuracy of the bathroom or kitchen scale. □

COL MORT BRIGADIER is a retired army paratrooper. He has an MBA in management and is a UCCE Master Gardener.

PHOTO OPPOSITE, courtesy of Calif. Assoc. of Nurserymen, is of Alocasia amazonica as a houseplant, which would be a spectacular holiday gift.

COPING WITH OUR IRRIGATION WATER

by BETTY NEWTON

AVOCADO TREES SOMETIMES HAVE leaves turn brown around the edges. You've noticed this condition. In a related problem, the ground may have a thin whitish deposit on the surface. It signifies a salt buildup. What should you do?

Be thankful if you don't live in Imperial Valley where swirls of heavy white salt crusts are common next to the fields. Their water has dissolved mineral salts from the rocks over which it flows. Southern California's Metropolitan Water District pulls San Diego area water out from the river from further upstream, with less dissolved salt content.

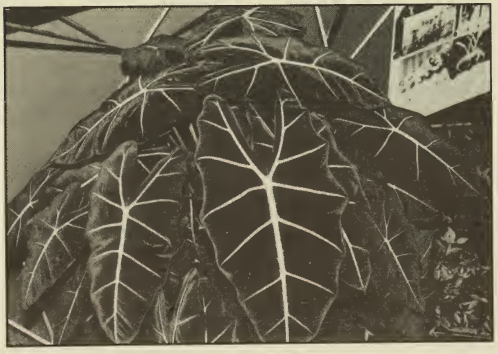
You should follow the example of those Imperial Valley farmers. First, check the drainage (water get-away) capacity of that area. If water stands, install a drain line from underneath running slightly downhill and away. Secondly, spread and incorporate gypsum or gypsite with the surface soil and then water heavily. The gypsum will push the salts off the soil particles they cling to and the water will carry them beneath the roots of plants.

It is strange to have a white-crusted surface after good rains. This suggests poor drainage. Or there may be a house foundation nearby or chunks of concrete left in the soil with lime dissolving in the soil. Calcium salts again.

SALTS ESSENTIAL

Plants need some salts in the soil. If there are none, then essential nutrients are missing. And if you leach all the salts from your potted palm, lawn, or from beneath your avocado tree, then feed right afterward with a gentle fertilizer; for you have taken every trace away.

It is very easy to have too much mineral salt in the soil. The severe browning or "burning" that frequently adorns the outer edge of large avocado leaves terrifies many newcomers and displeases the rest of us.



Avocado trees are especially susceptible to salts. Our imported water from the Colorado River has calcium, boron, magnesium, and chloride salts in it. Probably others I am unaware of, too. Any water in the Southwest that travels a long distance picks up salts. And as the soil gets too salty from repeated shallow waterings, the big-leaved avocado finds it cannot pull water out of the ground fast enough to meet its needs because water is held by the soil.

When full grown, avocados may use 40 to 60 gallons of water a day. It is standard orchard management to water twice as much as necessary every fourth watering to push salts lower. That routine precaution protects against excessive osmotic pressure from a salty soil. Once "burned," scorched leaves will remain on the tree for some time. You see them on alder and birch, and sometimes on magnolias, too. It is no one's fault.

Salts are essential but it is easy to have too much mineral salt in the soil as these situations suggest.

MEASURING THE SALTS

The total salts in a soil are measured by the degree of electric conductivity of that soil in solution. On a soil survey this is called the "E.C.". You cannot measure that yourself. Nurseries offer soil testing for less than $10.00. When your curiosity builds up enough, take in two cups of your dirt in a container. The E.C. number is one of the reasonably accurate and understandable results of this testing.

Please remember when aiming for a good soil for plants, you want an E.C. reading above .2 millimhos but below 2 millimhos. Above 2, you will need increasingly salt-tolerant plants. Above 2, many plant yields are reduced, growth is stunted, and finally leaf tips appear to burn. Carrots, beans, strawberries, cabbage, and lettuce are especially sensitive.

Plants don't live well with too much salt and they can't live without some. Sounds a bit like people doesn't it?□

(Adapted from Newton's book, *Gardening Beautifully in Southern California*, available at EarthSong Bookstore in Del Mar and Plant House Nursery, El Cajon.)

BETTY NEWTON teaches gardening classes for Grossmont Adult School and writes for the Sunday *San Diego Union-Tribune*.

DECORATING THE OLD LIGHTHOUSE

by BARBARA S. JONES

IN 1970 POINT LOMA Garden Club was asked by the Cabrillo Monument Superintendent to decorate a Christmas tree in the historic original Lighthouse. The Club had been decorating the monument building for special events since 1968.

The committee that year decorated a live tree with gorgeous, handmade, jeweled ornaments. The second year, the chair decided that it should be decorated with old fashioned type, handmade ornaments. Paper chains, yarn ornaments, and cookies made by the committee were used. Replicas of traditional old candle holders were purchased and used on the tree. On the third year I became the chair, the position I held until 1990. Both the Park Ranger in charge of the project and I felt that any ornamentation should be true to the period. We had both been disappointed by the usual decorating done in historical dwellings where it was obvious that such decorating had never been done or even existed at the time. So, with his and the Park Superintendents encouragement, I started trying to discover the proper decorations for this particular historic building.

The first step was to determine the type of decorations used for the holiday season and what type was used in the United States, especially in San Diego. We knew the years the lighthouse was occupied, 1855-1891. It had been painted white in 1885, so this was the date used for the restoration. By consulting books with pictures of period Christmas cards, magazine illustrations, and newspapers, a good idea of what was done in the period was obtained. Local newspapers of the period were read, too. By talking to older San Diego residents, even though they had not lived in 1885, the type of decorating done in this area could be determined. (People used to save ornaments and re-use them in the same way. Also, the making of certain decorations and foods were family traditions: paper chains, cornucopias, popcorn strings, etc.) I also went to Williamsburg and consulted experts at the bookstore about reliable references for historical Christmas celebrations. I went to the Smithsonian Museum in Washington D.C. to view the collection of historical Christmas tree ornaments of this period that were on display.

There was no known description of any decorating done at the lighthouse. Therefore, the decision was made to use the collected data and decide what might and could have been done by the residents of the lighthouse in 1885.

During the Victorian period most of the Christmas customs practiced today were developed. Before the 1700's Germans were decorating juniper trees with fruit and ornaments. This developed from an ancient custom of erecting a juniper tree that bore a fruit-like cone in winter as a symbol of life. By the late 1700's Pennsylvanians of German descent were erecting juniper trees on Christmas Eve and decorating them with apples, nuts, cookies, and strings of popcorn and cranberries. Prince Albert, who was German, introduced the decorated tree to England. The cover of the December 1850 *Godey's Lady's Book* had a sketch of the royal family—Queen Victoria, Prince Albert, and their children—gathered around a tree trimmed with ornaments and toys. Anything they did was avidly copied, especially by the tastemakers in the U.S. (The tastemakers were social leaders that people followed in order to be cultured and up to date.) In 1856 President F. Pierce erected a tree in the White House. After that, the tree rapidly became the focal point of every Christmas celebration in the United States.

Most Victorian trees were small and placed on a table. Candles were a must and were lighted only on Christmas eve and day. (Someone always stood by with a bucket of water to put out a fire.) The tree was put up and decorated on Christmas eve and removed within a few days. (The decorations at the Lighthouse are left up longer as is the current custom—the second week in December until after January 1.) The most elegant trees were decorated with blown glass balls imported from Germany. As these cost about $5.00 each and as a house could be rented for $5.00 per month, most people made their decorations. Walnuts that were cracked, the meat removed, the shells glued back together, and gilded were used. Yarn balls or circles cut from colored paper were common. Paper chains made by the children with butcher paper colored with school paints were traditional. Apples and oranges were hung on the tree. (Oranges were usually used in San Diego.) "Cat's Cradles," bags made of paper, were often used to hold the fruit. Paper cornucopias were made and filled with hard candy. Visiting children were given one of these as a gift. Popcorn was strung, too. In New England red cranberries were interspersed with the popcorn. We did not have cranberries here, so red chilies were used by some. (Toyon berries were not suitable.) Small toys were hung

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BALBOA PARK BOTANICAL BUILDING

by KATHY PUPLAVA and CALIFORNIA GARDEN STAFF

IT IS HARD TO RESIST peeking through the redwood lath, trying to catch a glimpse of the plants inside the Botanical Building that has been closed for renovations since February 1993. To the casual observer, the building may look as though it has been sitting idle since the scaffolding was removed this summer, but Park and Recreation Department workers have been putting in long hours on the basics: pruning and shaping existing plants, cleaning up debris, repairing water pools, installing irrigation systems, and replenishing the planter beds with fresh soil and amendments.

Some of the huge specimen plants, such as the tree ferns, the cycads, and the *Ficus auriculata* remained in the building during renovation. But most of the plants had to be cut back to the ground or removed to accomodate the scaffolding that completely filled the interior of the building.

Behind the scenes, at the Balboa Park Nursery on Pershing Drive, many of the plants that were removed for renovation have been cared for and grown-on for installation back into the building. There are hundreds of ferns, palms, begonias, bromeliads, and orchids ready for display. The park staff also has been scouring nurseries all over the county for interesting and attractive plants to add to the building.

The Botanical Building houses about twelve hundred permanent plants and seasonal color displays. Choosing plants is not as easy as it may sound because of the many microclimates within the building. The light availability and temperature change drastically in the winter and there is no supplemental heat. Although the Botanical Building may appear to be tropical, the conditions are so cool and shady in the winter that many tropical plants cannot survive. Trials of plants native to the subtropics and to higher altitudes are planned.

A grand opening celebration will take place November 19, 1994. The cost of the project was $321,000 and included replacement and reinforcement of the steel arch framework, the concrete and steel arch bases, and selective lath replacement. Four spindles that were part of the original building were reattached to the top dome for the first time in decades, and the building was painted.

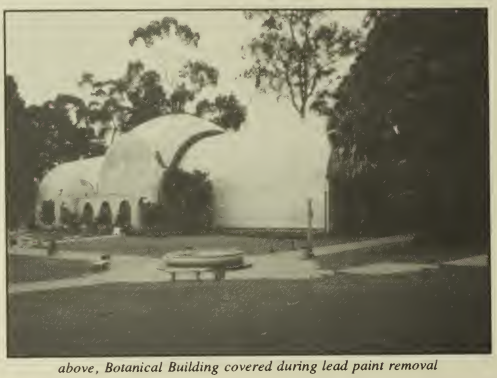
The Botanical Building, along with the adjacent lily pond, was built for the 1915 Panama-California Exposition as the theme building. This exposition often was referred to as the "Garden Fair" because of the extensive landscaping that was the beginning of the Balboa Park gardens as we know and enjoy them today.

Alfred D. Robinson, a founder of the San Diego Floral Association and *California Garden*, first excited exposition promoters about the possible construction of the Botanical Building. The metal framework, originally intended and designed as a train terminal building, was purchased from the railroad. Designed by Carleton M. Winslow, it is still one of the largest lath structures in the world. It is 250 feet long, 75 feet wide, and its center is 60 feet tall. The original design included a cage that stretched from door to door, which housed live birds. A glass greenhouse on the north side was removed in the 1950's during the last major renovation.

The Botanical Building will be open free to the public six days a week (closed Thursdays) beginning Saturday, November 19, 1994. We are seeking volunteers to act as docents in the building on weekends. If you are interested in this volunteer opportunity, please call 235-1114.□

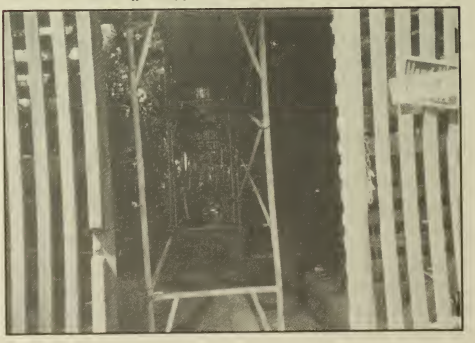
KATHY PUPLAVA is the Balboa Park Horticulturist with the City of San Diego Park and Recreation Department.

Photos by J. Coleman.



above, Botanical Building covered during lead paint removal

below, scaffolding fills interior of Botanical Building



DAYLILIES

by ROBERT HORWITZ

IF YOU ARE LOOKING for a perennial plant that is easy to plant, care for, and enjoy, choose the daylily (*Hemerocallis*). It fills space that is inconvenient for grass, is good for minor hill slopes, can be planted almost any time of the year, and needs only partial sun for generating lots of blooms. It fits into rock gardens beautifully and mixes well with other flowers such as daisies and *Agapanthus*. The flowers are available in shades of yellow, orange, purple, and rose.

Daylilies can be planted almost any time of the year. The American Hemerocallis Society recommends the following planting steps: (1) When you get the new plants, soak the roots in a weak liquid fertilizer solution for a few hours before planting; (2) Next, plant the roots in a soil mixture consisting of a good loam with peat moss, compost, and a dollop of bone meal; (3) Cover the root crown with about an inch of this soil mixture after setting the plants in the prepared ground; (4) Water well after planting. Mulching helps to conserve water.

Space the plants about a foot apart; as the years go by they will fill in the empty space. If they get too crowded, you can dig up the clump, divide into single plants, and replant. The many left over can be given to your neighbors. The roots are fleshy, so when you divide them it might be a good idea to sprinkle a little sulphur on the cut surface to preclude root rot.

The flowers are attractive in vases, but unfortunately only last a day or two, hence their name. Removing old blossoms and cutting new ones for display in the house will cause the plant to put out more blooms. It is pleasant to plant daylilies in patches so that the flowers will make a varied pattern against the green of the strap-shaped leaves.

Varieties are available that come in various sizes: from 18 inches for the smallest up to 3 feet for the biggest plants. Planting the smaller varieties in front with larger ones behind makes for the best display. It is a good idea to label them so that when you divide you can tell what you are keeping and what you are giving away. Sometimes small shoots appear on the stem; these can be cut off and rooted to form new plants. These pups will be just like the parent when they mature. □

ROBERT HORWITZ is a retired aerospace engineer and a regular contributor to local publications.

Drawing by Robert Horwitz

GIFTS

by STAFF

Two local authors have published books that would make thoughtful Christmas gifts. NAKED LADIES AND OTHER CALIFORNIA EXOTICA

Jane Field Alexander

San Marcos, 1994, 38 pages, softcover $8.95

This would be a great gift for a visitor or a helpful identification guide for a newcomer to California. Brief descriptions and excellent photos of thirty-five commonly grown and especially colorful plants from Southern California make this a particularly attractive booklet. It includes ground covers, perennials, shrubs, trees and vines.

Reviewed by R. Cox

A book with appeal for the serious gardener of California natives would be:

PROPAGATION SECRETS FOR CALIFORNIA NATIVE PLANTS

Jeanine B. DeHart

237 Seeman Dr., Encinitas, Ca., 92024, 1994, 29 pages, softcover, $5.00 or $6.14 postage included

If you are planning to propagate California native plants from seeds here is a new guide by Jeanine DeHart. Although *Propagation Secrets* covers about one half of the plants that are in Marjorie Schmidt's *Growing California Native Plants* (omitting most of the easy annuals) it does give propagation methods for the difficult species. A random comparison of a dozen plants resulted in two slight differences (which one is right?). One of those differences is *Cneoridium dumosum*, the bush rue. Neither Schmidt, DeHart nor the reviewer agreed on that one.

It is an easy to use and concise booklet for the serious propagator.

Reviewed by Don Miller

Other gift ideas are the 1995 wall callendars offered by Workman Publishing, New York. They open to 12″ x 24″ and are priced at $8.95.

Each month's photos are outstanding. *Herbs: Bouquets, Recipes and Fine Country Things* has a garden scene sequenced with an indoor scene of dining or table decoration. The tips by Emelie Tolley are taken from her books. *The Natural Garden* written and photographed by Ken Druse has scenes from his series of books on that subject.

WINTERING FERNS IN SAN DIEGO

by BOB HALLEY

SO! WINTER IS UPON us and most of our ferns are starting to look pretty ratty. What do we do now? The first thing we do is try to give the ferns what they look like they need. So much depends on the kind of fern and, most importantly, its natural habitat.

Some of our plants, notably the *Platycerium* and *Polypodium formosanum,* are behaving like it's spring, so we need to treat them that way. If any fern is growing strongly through the winter then we should continue to water it and feed it as usual. In fact, most of these plants will want a dormant spell come summer. These are almost the only ferns that we should feed again until spring.

There is another large group of plants called the "hardy ferns" that are used to wintering under ice and snow. Remember that it is like a desert down there under the snow. All of the water is frozen out of the soil and is not available to the plants. Some of these plants are deciduous and the fronds will turn brown and may fall off. I try to mark these with little white plastic sticks (for snow) so that I don't panic when they look like they are dying. Others will simply stop growing. The fronds may become ragged and gradually turn brown as winter goes on. In general, fronds that still have green in them should be left on until new growth starts to appear. It's a good idea to finish pruning them then before the old fronds get all mixed up with the new. They will need no food and very little water. I try to get by on natural rain water as much as possible but I don't let the soil become rock hard. **Extra water will rot the roots and the fern will never come back.** This is particularly true of potted plants.

Platycerium sp., staghorn fern

The largest group of ferns that we grow outdoors in San Diego are semi-tropical. They will almost stop growing for the winter but will stay green and continue to put up a few new fronds that may be quite small. This group includes most of the tree ferns. Since they are growing they need some water. They do not need food because that will encourage tender new growth that won't survive a cold night. I make sure they stay damp but once again, **no extra water**. In general, it pays to cut off fronds that have turned completely brown but to leave the ones which stay green. When new fronds start to appear in the spring the old disfigured fronds should be removed. Old fronds that are still nice and green should be left on the plant. There are a number of ferns, including all the *Pyrrosia*, that keep their fronds for more than one year. Good fronds should be left alone.

There is a special case in this group and that is the maidenhairs. Most of them have a very short dormant season. Some fronds turn brown, but they keep on growing a few new ones and then, suddenly, shortly after the winter solstice, they all burst into growth. When they start to grow they will have seemingly hundreds of tender little fiddleheads. It will then be impossible to remove the old fronds without severely damaging the plant. The solution is to go out one day in January and give them a complete butch haircut. Then I start to water and feed them gently and very soon there will be a forest of little croziers. In a matter of weeks my ugly mutilated little plant will sport a wealth of new, light green fronds. There are some other ferns that may be treated in this way. I cut back the *Microlepia strigosa* and the *Rumorha adiantiformis* at the same time as the maidenhairs. I also trim back some *Davallia* and *Humata* but it pays to be careful here because with some it will cost the plant a year's growth. Most of us also would **like** to do this with *Nephrolepis* that are or look like Boston ferns. This is a no-no! Cutting all the new fronds off these plants will frequently kill the plant. In this case we will just have to do the work ourselves and cut the old fronds out from the new ones.

There is one more aspect of ferns in winter that is worth mention. We are all used to transplanting, dividing, and repotting when plants are completely dormant. This is the way most plants are done but ferns prefer it if we wait until they have started to grow strongly in the spring. As always, we should try to leave the little feeding rootlets as undisturbed as possible. □

This text is reprinted from "Fern World," 1993 issues.

BOB HALLEY is a retired physicist and past president of the Fern Society. He is a native San Diegan.

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Now is the Time . . .

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES, UC COOPERATIVE EXTENSION, AND *CALIFORNIA GARDEN* STAFF

AFRICAN VIOLETS
Helen La Gamma

NOW IS THE TIME

TO PREVENT extreme differences between night and day temperatures.

TO KEEP the plants well groomed and repot those that have outgrown their pots. A good rule—the pot should be 1⅓ times the diameter of the leaf span.

TO CONTINUE to have good circulation of air around the plants.

TO PROVIDE adequate humidity; monitor the temperature carefully.

TO PLAN on using your plants with holiday decorations; plant in containers to match color scheme.

BEGONIAS
Margaret Lee

NOW IS THE TIME

TO CLEAN up all debris—remove dead leaves and spent blooms.

TO WATER as needed.

TO PUT a top dressing of your favorite mulch around plants to replace any soil or mulch washed away by fall rains.

TO GIVE a light feeding several times a month to help the plants withstand any adverse conditions a little better.

TO SPRAY for mildew control.

TO ALLOW tuberous begonias to die back on their own; put aside and let rest, but sprinkle occasionally.

TO BE VIGILANT for insects; spray for mealybugs and other pests.

BONSAI
Dr. Herbert Markowitz

NOW IS THE TIME

TO REDUCE watering, deciduous trees require just enough to keep them from drying out.

TO MOVE plants into shade if a hot spell occurs. Avoid a second growth period during this time—it will weaken the trees.

TO REFRAIN from fertilizing or transplanting at this time.

TO KEEP deciduous trees protected from sudden changes of temperature.

TO REMOVE any old leaves, fruit or seeds from deciduous trees.

TO PRUNE black pines by cutting the candles about half length.

TO GRAFT conifers in December.

BROMELIADS
Mary Siemers

NOW IS THE TIME

TO STOP fertilizing during fall and winter months, except those that are kept in a greenhouse.

TO REDUCE the frequency of watering when weather turns cooler.

TO PROTECT your plants from hail damage during the rainy season by providing overhead protection such as shadecloth that will allow plenty of light.

TO PROTECT plants from freezing temperatures by covering with sheets or newspaper.

TO KEEP plants clean by cutting spent blooms and dead leaves with scissors.

TO SPACE plants apart to allow air circulation. This helps to prevent scale.

CACTI & SUCCULENTS
Joseph A. Betzler

NOW IS THE TIME

TO WATCH your plants. Most cacti and succulents have a dormancy period. Depending on the weather, many winter growers may start early growing.

TO FERTILIZE the plants that are actively growing.

TO WATER only in the morning on a day that is going to be warm. By doing this, no standing water will be on plants in the evening.

TO PROTECT tender plants from excessive cold and winter rains. Repair cracks and leaks in shelters before the rains arrive.

TO KEEP ants under control; they transport aphids and mealybugs.

TO REMEMBER that when plants become too cold during the cold evenings the growth of fungi and bacteria can be fostered.

TO START looking for winter growing succulents to add as an extra dimension to your collection.

TO CLEAN up your plants' growing area.

CAMELLIAS

E. C. (Gene) Snooks

NOW IS THE TIME

TO FEED with a 2-10-10 fertilizer to promote larger and better blooms.

TO CONTINUE disbudding.

TO PICK up all old blooms to prevent petal blight.

TO SELECT new plants while in bloom.

TO TREAT some blooms with gibberellic acid for larger and earlier blooms.

TO MAINTAIN a regular spray program as needed. Watch for mites and looper worms.

TO KEEP a regular watering schedule, never let a plant dry out—maintain an even moist condition.

TO MAINTAIN humidity—mist in later afternoon on dry hot days.

TO KEEP from burning leaves.

DAHLIAS

Abe Janzen

NOW IS THE TIME

TO WITHHOLD water and fertilizer to let the plants go dormant.

TO ALLOW plants to dry—when brown about 12 inches from ground, cut off the stalk.

TO LEAVE tubers in the ground to harden off if there is good drainage. Otherwise lift roots before the heavy rains.

TO WASH clumps after digging, let dry a few hours before storing. If dividing tubers, treat cut area with soil sulphur, store in vermiculite, sand or other medium. Store out of the weather. Be sure tubers are tagged before storing.

EPIPHYLLUMS

San Diego Epiphyllum Society

NOW IS THE TIME

TO WITHHOLD fertilizer, especially those with nitrogen. Allow the plants to become semi-dormant.

TO WATER sparingly, but do not allow plants to dry out completely.

TO PROTECT plants from exposure to the elements. Frost, hail and strong winds can cause irreversible damage. Over exposure to harsh winter sunlight can be as detrimental as hot summer sun.

TO TIE or stake long branches so they will not breach when winds and rain arrive.

TO CHECK for snails and slugs; a few granules of Sluggeta at the base of the plant are often effective and leave little to no residue.

TO MAINTAIN good grooming and prune out nonproductive branches to conserve the plant energy.

FERNS

Ray Sodomka

NOW IS THE TIME

TO CHECK containers to ensure planting mix has not completely broken down; add more mix to containers that need it.

TO BE ALERT for insects. Slugs and snails are very active.

TO WATER if it does not rain. Check plants not reached by rain.

TO APPLY a weak fertilizer solution once more before the December rest period.

TO PLANT spores and keep in a warm area.

TO CLEAN out weeds, oxalis and debris from pots.

TO PROTECT plants at night in frost areas. Cover with newspaper or old sheets or place in garage.

FUCHSIAS

William Selby

NOW IS THE TIME

TO ALLOW plants to rest; reduce or stop fertilizing.

TO DO heavy pruning in mild areas or in a greenhouse. Can make cuttings if a good tip available.

TO CLEAN up. Remove all dead leaves, blossoms and debris from pots and baskets and around plants in the ground.

TO WATCH for insects, molds and fungus in warmer areas.

TO MULCH plants left outside in areas where there is danger of frost; move baskets under cover for protection.

GERANIUMS (Pelargoniums)

Carol Roller

NOW IS THE TIME

TO WATER thoroughly when plants become somewhat dry. Watering will not need to be done as often as in the warmer seasons. Allow the excess water to drain away. Keep the foliage as dry as possible.

TO CONTINUE feeding as needed. Do not allow plants to show prolonged signs of nutritional deficiencies. Use a balanced fertilizer which is dissolved in water.

TO CONTINUE a pest control and disease prevention program, using all products according to the manufacturer's direction.

TO PRUNE any plants which have not been cut back. At least one green leaf should remain on every stem of regals, scenteds and similar types. Lanky plants which were pruned in the fall can be cut again to produce compact plants.

TO MAKE cuttings from the prunings. Shelter cuttings from extreme weather.

TO PINCH the rest of the plants which were pruned in the fall.

TO GIVE plants temporary shelter if the temperature approaches freezing.

TO ROTATE plants on a regular basis in order to keep well-shaped.

IRIS

San Diego/Imperial Counties Iris Society

NOW IS THE TIME

TO CLEAN beds of dead leaves and weeds; aphids winter-over in debris filled areas.

TO SPRAY for aphids or give a light feeding of a systemic to control all sucking plant pests.

TO MAKE a final planting of bearded types, spurias, Louisianas and Siberians.

TO PLANT bulbous type iris—Dutch, English and Spanish for spring bloom.

TO MOVE and replant Pacific Coast natives in late December when the little white roots are showing. Water well until they are established.

ORCHIDS

Charles Fouquette

NOW IS THE TIME

TO FEED a dilute solution of 30-10-10 fertilizer to intergenetic *Oncidium* hybrids, *Brassidium*, *Miltonia* if they are planted in bark. If they are grown in any other medium, feed a solution of 18-18-18. (The numbers reflect a guideline, not hard and fast numbers.)

TO FEED *Cymbidium* a 30-20-20 fertilizer. Stake new spikes—do not rotate plants. Protect buds and flowers from hail, rain, or sun damage.

TO REPOT *Cattleya* if new growth is outside of the pot and the plant is in active growth. (Otherwise, wait until spring.) Feed an 18-18-18 fertilizer, or similar, during the winter and only every third watering.

TO CLEAN up old leaves, flowers, and other "trash" in growing areas. Remove shadecloth to give as much light as possible to the common growing areas. Clean the swamp cooler; drain the water out of the bottom; protect the motor by wrapping it with a plastic trash bag after you have oiled it and checked the belts and cords.

TO CLEAN humidity spray nozzles. Remove nozzles from feed line, loosen the brass parts and take apart. Soak these parts in a glass container with a solution of ten parts water to one part swimming pool acid (*e.g.*, phosphoric, muriatic), using protective gloves and goggles. Or use pure vinegar, which works well but is slower. Through the glass container you will see when the parts are clean; rinse them with clear water and reinstall, after flushing the feed lines well.

TO CHECK the heater fittings, pilot light, flues, and vents. Check that the temperature sensors and activators are set at their HI-LO settings. You must have a fresh inlet somewhere in the hothouse, for AIR. You need clean air for combustion in the heating chamber and to replace the air burned in combustion going up the flue to the outside of the hothouse. If you don't provide a clean air intake, you will have poor and unclean combustion and ethylene gas in the hothouse killing flowers.

TO LET deciduous *Dendrobium* go dormant. Stop feeding when leaves start to drop. Water just enough to maintain root moisture. (Start to fertilize and water normally next spring when buds have swollen and are starting to develop and plant is starting active growth.)

TO HAVE *Phalaenopsis* be well on their way in the flower initiation mode at this time. Increase light to about 1500 footcandles by any means—shadecloth removal, etc. Try to duplicate the weather in the areas where phals are native (at this time of year the temperatures drop and it is very clear, cloudless, and relatively dry). You lowered the night temperature through October to 52-55 degrees while fertilizing with dilute solutions of 30-20-20 every other watering. In November, maintain the high light and increase the night temperature to 62-65 degrees (your target minimum temperature). The first week, water with clear water to flush all salts that may remain. The next three weeks, water with a solution of epsom salts, mixed 4 lbs. in 5 gals. water, applied through a Hozon proportioner. This should give the plants the magnesium sulfate they need for colorful flowers. The first week of December, flush again with clear water. The next three weeks, use a high phosphorus fertilizer to help flower production and plant turgidity. By January, you should be back to average care and fertilization. Try to maintain the high light until the temperatures get warmer, then drop the light to 1000± footcandles until next year. Maintain air movement at all times.

ROSES

Marianne Truby

NOW IS THE TIME

TO ENCOURAGE rose bushes to go dormant. Do not remove rose hips but be aware roses never do go dormant here. Do not let bushes become too dry if rains are late.

TO FERTILIZE with only low nitrogen fertilizers.

TO SELECT replacement and new varieties from bareroot supplies.

TO PREPARE planting holes by adding bone meal and or superphosphate.

TO PRUNE floribundas in late December.

TO DORMANT SPRAY in December and early January.

NATIVES

Jeanine De Hart

NOW IS THE TIME

TO BEGIN planting the natives while the weather is cool and the days shorter.

TO LIGHTLY feed the plants that have been in the ground since last year. While it's true that the natives grow in the wild with no additional additives, most of our homes are built on fill that contains next to nothing in the way of nutrients.

TO NOTE places in your yard that hold the water. These are areas where you want to avoid planting *Arctostaphylos*, *Ceanothus*, *Fremontodendron* and other water sensitive species. If your entire yard is poorly drained, you may wish to build up mounds to plant on.

TO REMEMBER to keep the hummingbird feeders full, as where there are natives, there will be more of these little jewels.

GREEN THUMB

Penny Bunker

NOW IS THE TIME

TO FEED bird-of-paradise. Cut out dead growth from clumps to improve appearance.

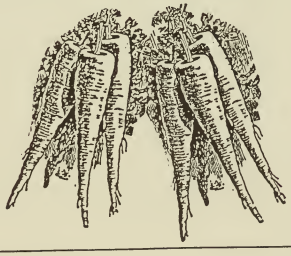
TO CUT mums to within a few inches of the ground after blooming.

TO PLANT bulbs for spring blooms—daffodils, narcissus, ranunculus, anemones, scillas, callas, tulips and hyacinths.

TO PRUNE and shape holly and pyrancantha when cutting berries for holiday decorations.

TO APPLY dormant spray in December to control pests and disease next year; to use snail and slug bait regularly.

TO PREPARE and enrich your soil, preparing now for the bareroot planting of roses, trees, etc. in late December and January.



FRUIT TREES AND VINES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension

NOW IS THE TIME

TO PRUNE deciduous trees and vines after their foliage has dropped. Wait until early spring to prune evergreens.

TO SPRAY dormant deciduous trees and vines with horticultural oil to kill scale, insects, spider mites and other overwintering pests.

TO SPRAY peach and nectarine trees with a fungicide such as lime sulfur (calcium polysulfide) to control leaf curl.

TO ORDER bare root trees and vines to plant in December or January.

TO PROVIDE frost protection for young citrus and other subtropical fruit trees.

VEGETABLES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension

NOW IS THE TIME

TO REMOVE and compost warm-season vegetables to prevent pests and diseases from overwintering on them.

TO CONTINUE planting cool-season vegetables which will not be subject to frost injury.

TO PLANT seeds of short-day onions, such as 'Grano', 'Granex', or 'Crystal Wax', and garlic cloves in November for bulbs next summer.

TO PLANT dormant crowns of artichoke, asparagus, and rhubarb. To avoid crown rot of rhubarb, plant crowns in containers filled with porous potting soil and transplant into garden where drainage is good after several leaves have developed.

VEGETABLES, ANNUALS

from UC Cooperative Extension Publications

NOW IS ONE OF THE BETTER TIMES IN FROST-FREE AREAS

TO PUT IN TRANSPLANTS OF: broccoli, cabbage, and cauliflower — Chinese forget-me-not (*Cynoglossum amabile*), cineraria, fairy primrose (*Primula malacoides*), garden stock (*Matthiola incana)*, pansy, pink sand verbena, pot marigold (*Calendula*), snapdragon, and viola.

TO PUT IN SEEDS OF: beets, carrots, chard, kale, kholrabi, lettuce, onion (green and dry), parsnips, spinach, and turnips — baby blue eyes, California poppy, candytuft, Chinese forget-me-not, forget-me-not (*Myosotis sylvatica*), sweet allysum (*Lobularia maritima*), spring flowering sweet pea, and Virginia stock (*Malcolmia maritima*).

Book Reviews

PLANTS FOR SHADE
Allen Paterson
North Pomfret, Vt., Distributed by Trafalgar Square, 1993, 214 pages, 13 color photos, 6" x 9¼", softcover, $16.95

The first part of this book is devoted to a thoughtful discussion of the nature of shade and its potential, and to making a definitive statement about it. Shade varies according to the angle of the sun, the time of year and time of day, and whether the shade-producing factor is solid (a wall) or open (a tree). Allen Paterson has worked in the Chelsea Physic Garden in London and is also associated with the Royal Botanic Gardens in Hamilton, Ontario. His analysis gives a good introduction to the annotated lists he provides. These are grouped according to need, beginning with shrubs which are lime-haters and those which are lime-lovers, and continuing with plants for shady areas. Bulbs, ferns, and herbaceous plants are also listed.

In the last chapter the author shares his empathy with shade gardens and writes month-by-month descriptions of their ever-changing attractions. Some of these effects may be hard to achieve in Southern California, but the list of recommended reading provides encouragement. It is worth noting that the SDFA library contains several hard-to-find books by Gertrude Jekyll and William Robinson, both of whom are quoted by the author.

Reviewed by Elsie Topham

ORCHID GROWING BASICS
Gustav Schoser
New York, Sterling Publishing Company, 1994, 128 pages, 110 color photos, 28 color drawings, 6¾" x 9½", softcover $12.95

This is an excellent book for amateur orchid growers. It contains recipes for potting mixes and lists the potting mixes preferred by each genus. The author suggests that the growth of particular orchids can be enhanced by adding specific chemicals to the mixes. The book provides a detailed description of conditions for cultivating different types of orchids. Orchid growth and resting periods are discussed along with the cultural adjustments necessary for each period. This book contains illustrations and descriptions of orchid diseases and parasites along with suggestions for treatment. Symptoms of improper culture are documented.

The color photos identify one hundred various orchid hybrids and species. The author describes the growing conditions preferred by several genera and categorizes orchids according to the complexity and feasibility of cultivation. These three factors allow amateur orchid growers to tailor their collection according to personal preference, environmental conditions at the residence and to orchid-growing experience or lack thereof, possibly sparing the novice the agony of killing a plant.

Reviewed by Beatrice and Richard Griffey

REFLECTIONS OF THE SPIRIT: Japanese Gardens in America
Maggie Oster
New York, Dutton Studio Books, Penguin Group, 1993, 240 pages, 175+ color photos, 9" x 11¼", hardcover, $40.00

This is an attractive coffee-table book dealing with the American interpretation of Japanese gardens. There are many beautiful pictures of Japanese-influenced gardens throughout the United States. There is a brief history of Japan and explanations and pictures of design principles. Unfortunately features described were sometimes an interpretation in that garden and not a "must-do" for the particular feature. Only someone who had extensively studied gardens and garden design in Japan will be able to identify them.

There are suggestions for designing a personal garden and instructions for creating special effects. At the end of the book there is a list of Japanese influenced gardens in America, sources of plant material found in the book, and of books dealing with gardens of this type. The pictures of these beautiful gardens are lovely.

Reviewed by Barbara S. Jones

INDEX OF GARDEN PLANTS
Mark Griffiths
Portland, Timber Press, 1994, 1,298 pages, 15 b&w line drawings, hardcover, 6" x 9¼", $59.95

This book is based on *The New Royal Horticultural Society Dictionary of Gardening* that is considered the standard reference for garden plants. There are authoritative names for over 60,000 ornamental and economic plants, 30,000 cultivars, plus 12,000 common names. Botanic research has led to changes in nomenclature. Plant names now rejected by botanists are retained as a cross-reference.

Each plant is described concisely and the range and hardiness rating are given. Many of the plants in common use today are not listed in older references. After one figures-it-out it is easy to use. The only criticism I have is

that the world is divided into only 11 hardiness zones and there is no map. The zones are identified by the average annual minimum temperature for each climate zone. All of San Diego County is included in Zone 11 (a minimum temperature of over 40°F.) In using the book I found that many plants that flourish here were listed in a different zone. Maps of the European-Asian continent and the U.S.A. can be found in the *Dictionary of Gardening*. The maps are informative and I have made a photocopy to tuck into my copy of this excellent reference book.

Reviewed by Barbara S. Jones

MAPLES OF THE WORLD

D. M Van Gelderen, P. C de Jong, and H. J. Oterdoom

Portland, Timber Press, 1994, 458 pages, 207 color photos, numerous line drawings, 8½"x 11", hardcover, $59.95

This book on maples represents nineteen years of research by three dedicated scholars; a professional nurseryman, a curator of university botanical gardens and a retired surgeon. A detailed section on the taxonomy and reproductive biology of the genus suggests considerable identification errors in the past. Over 2,500 species, hybrids and cultivars were researched. A sincere effort was made to provide order and understandability to this diverse body of information. Items discussed on the genus *Acer* (maple) include fossil records, diseases and pests, products derived, the use as landscaping and street trees, history, and distribution. The genus is found naturally throughout much of the northern hemisphere and found in all states of the U.S. except Florida.

The information compiled has produced a significant, technically oriented book which has led the authors to a proposed revision of the taxonomy of the genus *Acer*. The outstanding color photography showing details of foliage and fruiting bodies adds considerably to the usefulness of the study. Also included is a list of worldwide nurseries where maples are sold. *Maples of the World* provides an immense compilation of information on a genus that is widely distributed and used.

Reviewed by Dorcas Utter

THE GARDENER'S GUIDE TO BRITAIN

Patrick Taylor

Portland, Timber Press, 1994, 320 pages, 250+ color photos, 9 maps, 5" x 7½", softcover, $19.95

For those about to travel to Great Britain, or those who just dream about visiting the great English gardens, this book is a well-organized, easy-to-follow guide tour featuring the best of things horticultural to be found in England.

This book covers the author's personal favorites in both gardens and garden suppliers. Each garden's individuality and details have not been lost on the sharp eye of the author. He has done his homework, researching the types of plants to be found at each location. If a catalog is offered, owners' names and hours of operation are listed. Along the way, Mr. Taylor entertains us with historical anecdotes on the creators and designers, garden lore and even a bit of gossip: all of which make for an interesting, even educational, read.

Any gardener fortunate enough to be traveling to this part of the world would be inspired to visit any of the places listed in the book. Printed on heavy stock but in a size well suited to a suitcase, this book would provide visitors an enjoyable diversion from museum and castle going. The photography is of high quality; it has been taken by the author and therefore captures his feelings for and the sentiment of each garden's individuality. Some photos have an almost dream-like quality and reflect the predictable "Romantic" sense found often in English gardens

Reviewed by Claire Norman Trine

CLEMATIS AND THE RANUNCULACEAE

Deborah Kellaway

Portland, Timber Press, 1994, 128 pages, 41 color photos, 8" x 9½", hardcover, $22.95

Ranunculaceae (the buttercup family) includes many favorites besides the ranunculus and clematis, such as, delphinium, larkspur, columbine, helleborus, anemone, globe flower and meadow rue. Deborah Kellaway takes the reader through the seasons of the year discussing members of the family as they bloom. Her pleasure as each additional one arrives is evident and her descriptions are so lively and yet very precise: expressed so that seeing the flower you remember her way of identifying it.

Anyone interested in learning more about plant families will love this book; not only because of the information on the Ranunculaceae but as a guide on how one can study plant families in a leisurely way without being too knowledgeable about botany.

Reviewed by R. Cox

PRIMULA

John Richards

Portland, Timber Press, 1993, 331 pages, 116 paintings on 19 color plates, 51 color photos, 8½" x 11¼", hardcover, $49.95

This is a complete account of the genus primula which is found in the moister and cooler regions of the Northern Hemisphere. Only a few species are suitable as garden plants in Southern California. This reference book provides taxonomy of the entire genus, divided into thirty-seven sections. Each section includes groups of species that resemble one another and frequently hybridize with each other. There are short chapters on history, evolution, and cultivation along with a longer one on heterostyly and homostyly that will appeal to the specialist.

Reviewed by R. Cox

PLANTING ANTS

by RICHARD D. JONES

REFERENCES TO NATURE AS a guide to planting are well-known among American Indians. Squanto is supposed to have advised the Pilgrims to plant ". . . when leaves of the white oak were as large as a mouse's ear." In the Plymouth area this is reckoned to be about mid-April. But here in the Southwest the Papagos of southern Arizona practice flood farming. Their thirteen-month lunar calendar squeezes in *Jukiabig mashat*, "Rain-moon month," around mid-July through early-August. They select alluvial fans at the end of dry river courses and plant after the first soaking.

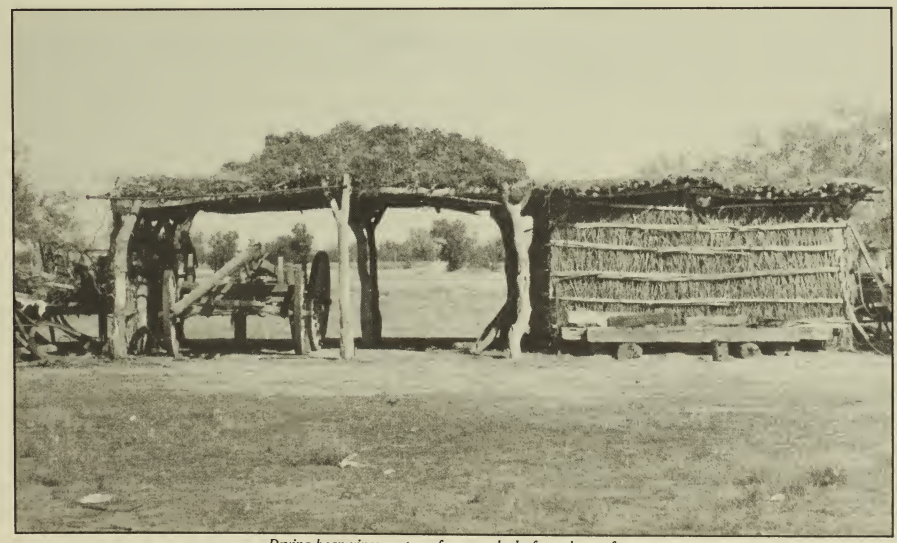
Returning from their cactus camps in the saguaro covered foothills loaded with cactus fruit, *bahidaj,* the more traditional families brew "wine" for the rain ceremony, the *Nawit-i*, the "Sit-and-Drink." The wine, being a mild diuretic, was good imitative magic. Heavy rains and flash floods usually occurred right on schedule.

Once, in 1963, I asked a Papago friend where he intended to plant his *bawi*, tiny white tepary beans (*Phaseolus acutifolia latifolius).* He said exactly *where* varied from time to time, depending on the rains. If they had received no rain until then (Rain-moon), he expected very soon a flash flood, a real "gully washer." He intended then to plant some beans up toward the more narrow channel anticipating the torrent of water coming down the dry river bed. Closing his hand he measured from his knuckles to his elbow, "This deep." I asked how the little beans had energy to push up that far, some fifteen inches! He explained that the torrential stream at that point usually swept away at least a foot of top soil. The water would then seep down and the beans had no difficulty popping up through the remaining two or three inches of soil. However, if there had already been rain, a prior soaking, the best place to plant would be shown by the ants. Then, before planting his beans he'd walk around at the very tip of the alluvial fan and find a place where the ants were "busy drying out." They carry wet grains of sand to the surface; each grain just small enough for an ant to carry. In such a place he would plant the beans about half an index finger deep. In this place water seeps down very slowly.

Aerial photographs of Papago (*Tohono O'otam*) "Desert People" field villages clearly show that they are well-named: "Big Fields" (*Gu Oidak),* "Mouth-of-the-Wash" (*Ak Chin*) . . . many of these, but there are two or three villages cryptically named (*S'Totonik*) "Many Ants." Until this interview I had never known the significance of ants to the Papago farmers. Papago families build their field houses on ground adjacent to the washes, but nature carves new channels from time to time. Villagers change their house locations to be close to the finest soil for planting, soil carried by dutiful ants. □

(Editor's Note: These native beans flourish with little trouble in the sun in any fertile, well-drained soil. They are prolific growers and will tolerate heat and drought.)

RICHARD D. JONES, Ph.D. taught cultural anthropology at San Diego State University and other institutions. He is now retired. He gathered this photograph and information from 1963 through 1965 for a Ph.D. dissertation and for a Papago Health Project.



Drying bean vines on top of wagon shed after a heavy frost

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Balboa Park, San Diego

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FALLBROOK GARDEN CLUB
Pres: Mr. Wilford Gower 723-7164

FLEURS DE LEAGUE GARDEN CLUB
Chrm: Mrs. Angela Talbot 454-9200
2nd Mon - 10:30 am, Home of Members

GROSSMONT GARDEN CLUB
Pres: Mrs. Dolores Smith 464-2457
2nd Mon - 9:30 am, 4975 Memorial Drive, La Mesa

LA JOLLA GARDEN CLUB
Pres: Marcia Wilcox 488-6467
3rd Tue - 1:30 pm, L.J.Lutheran Church

LAS JARDINERAS
Pres: Mrs. Gretchen Allen 222-3643
3rd Mon - 10:30 am, Home of Members

MEN'S GARDEN CLUB OF SAN DIEGO COUNTY
Pres: Mr. Patrick Shields 724-3749
4th Sat - 1:00 pm, MiraCosta Community College, Horticulture Building #T-700

MIRACOSTA HORTICULTURE CLUB
Pres: Renate Ritter 945-1287
3rd Sat - 1:00 pm, MiraCosta Community College, Horticulture Building #T8

PACIFIC BEACH GARDEN CLUB
Pres: Mrs. Dale S. Munda 272-9727
2nd Mon - 1:00 pm, Recreation Center

POINT LOMA GARDEN CLUB
Pres: Mrs. W. Cross (Marilyn) 226-6441
2nd Wed - 10:00 am, Westminster Presby Church

POWAY VALLEY GARDEN CLUB
Pres: Maxine Tudor 451-1064

RANCHO SANTA FE GARDEN CLUB
Pres: Mr. Harold Sexton 756-1554
Hort Chrm: Mrs. Carol Streeter
2nd Tue - 7:30 pm, Garden Club

SAN CARLOS GARDEN CLUB
Pres: Mrs. Art Kuehn 582-0230
4th Tue - 9:30 am, Home of Members

SAN DIEGUITO GARDEN CLUB
Pres: Mrs. Grant S. Baze 756-3443
4th Wed - 9:30 am, Quail Bot. Gardens

SCRIPPS MESA GARDEN CLUB
Pres: Cindy Drake 271-8933
4th Mon - 6:00 pm, Scripps Ranch Library

THE VILLAGE GARDEN CLUB OF LA JOLLA
Pres: Mrs. W. Keith Garrick (Pat) 287-0282
4th Thu - 1:00 pm, United Methodist Church

THE VISTA GARDEN CLUB
Pres: Mr. William Winters 727-5505
1st Fri - 12:00 pm, Vista Senior Center

IKEBANA SCHOOLS

ICHIYO SCHOOL OF IKEBANA
SAN DIEGO CHAPTER
Pres: Haruko Crawford 660-2046

IKEBANA INTERNATIONAL CHAPTER 119
Pres: Oleta Stevens 723-9490
4th Wed - 10:00 am, Casa del Prado

IKENOBO CHAPTER OF SAN DIEGO
Pres: Mrs. Charles Oehler 278-5689

OHARA SCHOOL OF IKEBANA
LA JOLLA CHAPTER
Pres: Connie Davis 672-0128
2nd Tues - 10:00 am

OHARA SCHOOL OF IKEBANA
SAN DIEGO CHAPTER
Pres: Mrs. Walter Bourland 276-4667

SOGETSU SCHOOL OF IKEBANA
SAN DIEGO BRANCH
Pres: Mrs. Leroy Lahey 429-6198

PLANT SOCIETIES:

AFRICAN VIOLETS

HEARTLAND AFRICAN VIOLET SOCIETY
Pres: Pat Akers 579-1975
3rd Tue - 7:00 pm, Wells Park Ctr,El Cajon

SAN DIEGO DAYTIME
AFRICAN VIOLET SOCIETY
Pres: Beverly Decker 442-7484
2nd Mon - 1:00 pm, Christ United Methodist Church

BAMBOO
SOUTHERN CALIFORNIA CHAPTER
AMERICAN BAMBOO SOCIETY
Sec: George Shor 453-0334

BEGONIA
ALFRED D. ROBINSON BRANCH
AMERICAN BEGONIA SOCIETY
Pres: Mrs. Crystal Zook 226-6667
2nd Tue - 10:30 am, Home of Members
PALOMAR BRANCH
AMERICAN BEGONIA SOCIETY
Pres: Ingaborg Foo 724-4871
SAN MIGUEL BRANCH
AMERICAN BEGONIA SOCIETY
Pres: Mrs. Eleanor Calkins 746-4743
Last Sat - 10:30 am, Home of Members

BONSAI
SAN DIEGO BONSAI CLUB, INC.
Pres: Lucinda Grove 669-0542
2nd Sun - 11:00 am, Casa del Prado

BROMELIAD
BROMELIAD STUDY GROUP OF BALBOA PARK
Pres: Stephen Johnson 484-5948
2nd Tue - 7:30 pm, Casa del Prado
SAN DIEGO BROMELIAD SOCIETY
Pres: Gayle Ver Steeg 488-1661
4th Wed - 7:30 pm, Casa del Prado

CACTUS & SUCCULENT
PALOMAR CACTUS AND SUCCULENT SOCIETY
Pres: Ronald A. Chisum 753-3651
4th Sat - 12:45 pm, Joslyn Sr Ctr, Escondido
SAN DIEGO CACTUS AND SUCCULENT SOCIETY
Pres: Mr. Joseph Betzler 239-0804
2nd Sat - 1:00 pm, Casa del Prado

CAMELLIA
SAN DIEGO CAMELLIA SOCIETY
Pres: Dean Turney 299-5418
3rd Wed - 7:30 pm, Casa del Prado

DAHLIA
SAN DIEGO COUNTY DAHLIA SOCIETY
Pres: Gerald Lohmann 279-5135
4th Tue - 7:30 pm, Casa del Prado

EPIPHYLLUM
SAN DIEGO EPIPHYLLUM SOCIETY
Pres: Mrs. Margaret Pethley 484-4189
2nd Wed - 7:30 pm, Casa del Prado

FERN
SAN DIEGO FERN SOCIETY
Pres: Phyllis Bates 436-1419
3rd Thu - 7:30 pm, Casa del Prado

FRUIT
CALIFORNIA RARE FRUIT GROWERS
Pres: Saul Goldstein 427-7775
4th Thu - 7:30 pm, Casa del Prado

FUCHSIA & SHADE PLANTS
SAN DIEGO FUCHSIA AND SHADE PLANT SOCIETY
Pres: Mr. Carl Hicks 748-0686
2nd Mon - 7:00 pm, Casa del Prado

GERANIUM
SAN DIEGO GERANIUM SOCIETY
Pres: Mrs. Gladys Ford 286-3976
2nd Tue - 7:30 pm, Casa del Prado

HEMEROCALLIS
SOUTHWEST HEMEROCALLIS SOCIETY
Pres: Ms. D. D. Herman-Walker 263-5324
1st Sat - 10:00 am, Quail Gardens

HERB
THE S. D. COUNTY HERB SOCIETY
Pres: Kathleen Delancey 746-5038
THE HERB CLUB
Pres: Judy Dunning 669-0222
3rd Thu - 7:30 pm, Call for location

HOYA
SAN DIEGO HOYA GROUP
c/o: Harriette Schapiro 273-4267
North County 432-8640

IRIS
SAN DIEGO/IMPERIAL COUNTIES IRIS SOCIETY
Pres: Hazel E. Carson 264-8688
2nd Sat - 10:00 am
Casa de las Campanas, RB

IVY
THE AMERICAN IVY SOCIETY
SAN DIEGO CHAPTER
Pres: Johnny Stellini 233-4338
1st Mon - Casa del Prado

NATIVE PLANTS
CALIFORNIA NATIVE PLANT SOCIETY
SAN DIEGO CHAPTER
Pres: Bertha McKinley 270-9573
3rd Tue - 7:30 pm, Casa del Prado

LAKE HODGES NATIVE PLANT CLUB
Pres: Donna Zimmer 480-4750
4th Mon - 2:00 pm - St. Bart's Episcopal, RB

ORCHID
CYMBIDIUM SOCIETY OF AMERICA, INC.
SAN DIEGO COUNTY BRANCH
Pres: Craig Johnson 721-5547
3rd Wed - 7:30 pm, Carlsbad Woman's Club
SAN DIEGO COUNTY ORCHID SOCIETY
Pres: Richard Chambers 280-8939
1st Tue - 7:30 pm, Casa del Prado

ORGANIC
BONITA ORGANIC GARDEN CLUB
Pres: Mrs. Mary Smith 421-7730
3rd Tue - 7:00 pm, Bonita Valley Baptist Church

ROSE
EAST COUNTY ROSE SOCIETY
Pres: Miriam Yoder 669-6977
1st Sun - 2:00 pm, Gardens of Members
SAN DIEGO ROSE SOCIETY
Pres: Frank Grasso 235-0004
3rd Mon - 7:30 pm, Casa del Prado

TREES
PEOPLE FOR TREES
Pres: Curt Lutz 224-4423

WATER GARDEN
SOUTHERN CALIFORNIA WATER GARDEN SOCIETY
Contact: Walter Pagels 582-5408

PROFESSIONAL AFFILIATES:
CLASSIC GARDENS 459-0316
P. O. Box 2711
La Jolla CA 92038-2711

AFFILIATES:

Send changes to: Lynn Beyerle, Affiliates Editor *California Garden*, Casa del Prado, Room 105, Balboa Park, San Diego CA 92101-1619. Call 232-5762.
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("Decorating the Old Lighthouse," continued from page 172)

on trees in this period, but paper doll chains made of newspaper or butcher paper were made and used here. (The figures were of animals and toys as well as of dolls.) The star on top is a later addition. Queen Victoria used fruit studded with small British flags, so flags were popular. Creches were not used and if a scene was made under the tree it was of a farm with small animals and buildings.

People did not spend much money on gifts and homemade gifts were favored. New underwear or socks were given to children. A girl might get a new ribbon for her hair or a new dress for her doll. A boy would receive a ball, top, or marbles. The stocking always had an orange at the toe and was filled with nuts and hard candy. A comb or pencil might be stuck in, too.

Prior to the general erecting and trimming of trees at the holiday season, San Diego homes were decorated with festoons of greens, bouquets and wreaths. Poinsettias were used for bouquets and toyon, the California holly, was used for bouquets and wreaths. Local wild mistletoe was hung over doorways, too.

Point Loma Garden Club still owns the decorations and decorates the lighthouse every year as its gift to our Country. To break up the starkness the protective windows they are hung with festoons of popcorn-chili strings and pomander balls (that were made and used in the period). Every year, before the decorating, members string the newly popped (air) corn at a traditional chili luncheon. For all of us, this is the beginning of our festive holiday season. □

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COMPILED BY JACQUELINE COLEMAN

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("Polly's Garden," continued from page 169)
the correct feel and proportions. The resulting finished work looks natural but with much effort from man's or, as in this case, woman's hands.

More garden rooms can be found near the dining room. A tiny place for a cup of coffee or to read a book is off the dining room facing southwest. By adding a white pergola to the house and putting in steps, the proximity to the current garage (formerly the barn) is kept from becoming claustrophobic. With the addition of large stained glass pictures, hung low from the barn roof, more sense of depth is created. At ground level, the layering effect is continued with sword ferns, the tiniest of fuchsias, miniature campanula, and baby's tears filling in the brickwork. Conveniently for the nearby kitchen, this is also where the herb garden can be found.

In Polly's world, every bit of space that can support a growing thing has been put to good use. The side path along the length of the house has been planted with more tall ficus trees along the wood fence. From their branches hang baskets of Boston ferns placed so diners may enjoy their lushness while eating in the dining room. More azaleas and gardenias are planted at the base of the ficus thus grounding the trunks and softening the fence as well.

Though Polly claims this garden can wait for work to be done on it, she spends at least one full day each week on its care. Usually she will be joined by a helper, and together they prune, plant, spot water, and treat for pests. Though the garden has been outfitted with automatic watering, Polly sees to it that plants which need more water will get it. Snails are the worst enemy. By placing snail bait or by working bran, such as horses eat, into the soil these voracious eaters can be kept down.

Polly's background as a costume designer would seem a long way from the ability she demonstrates as a consummate garden designer. She claims to have almost fallen into this career, and though she has done work for others, enjoys it more for her own pleasure. This seems an understatement, for her previous residence was featured in a magazine in 1984. This current house has been noticed as well: for the past years, it has won in Coronado's home front judging contest during the annual Flower Show weekend. Brushing aside such public recognition, Polly says in her charming self-effacing manner, "It's simply what I love to do." When asked what she will do next she smiles and laughs, "My husband has always wanted a Spanish style hacienda. Perhaps that will be my next project." We can hardly wait!

CLAIRE NORMAN TRINE interviewed Polly while an intern from CSU San Marcos with the Cornado Visitor Information Center promoting the Annual Coronado Flower Show.

Photographs by Polly Jones.

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